

Use Attainability Analysis

for

WBID 0898 Muddy Creek

Submitted by

Missouri Department of Natural Resources Staff

To

Missouri Department of Natural Resources
Water Protection Program

JUL 14 2005

Field Data Sheets for Recreational Use Stream Surveys

WATER PROTECTION PROGRAM

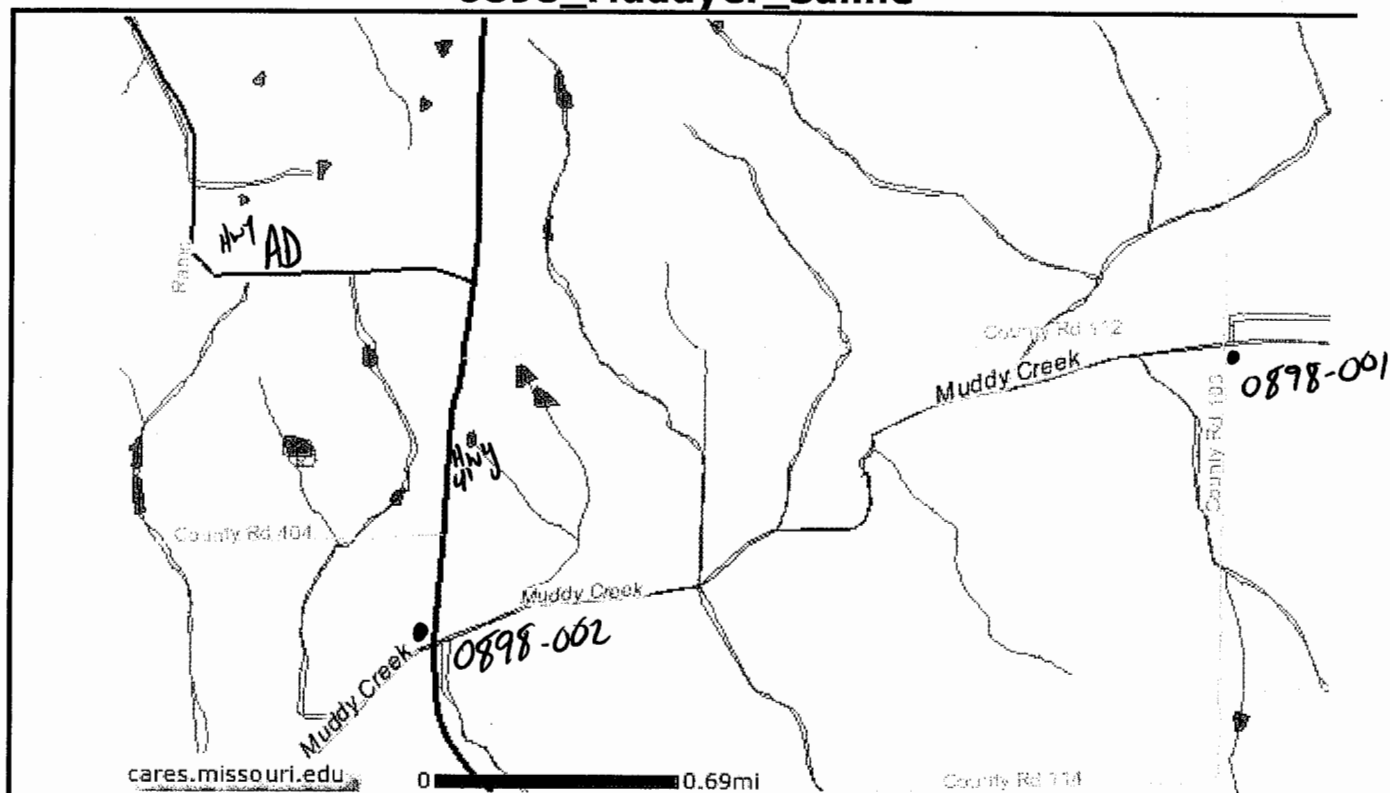
Data Sheet A - Water Body Identification

Water Body Name (from USGS 7.5' quad):	Muddy Cr.
8-digit HUC:	10300104
Missouri WBID #:	0898
County:	Saline
Upstream Legal Description:	County Rd 103 + County Rd 112
Downstream Legal Description:	County Rd 412
Upstream Coordinates:	N 39.27796 W 093.18428
Downstream Coordinates:	N 39.21133 W 093.27307
Discharger Facility Name(s):	Miami Township R-1 Sch.
Discharger Permit Number(s):	MO 0094561
Number of Sites Evaluated:	3
Name of Surveyor and Telephone Number:	Arnon Bleibaum 816-622-7018
Organization:	MO DNR - KCRO
Position:	Env. Specialist

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Arnon Bleibaum Date: 7/13/05

0898_MuddyCr_Saline



Legend

- Water Quality Information System (WQIS)

Roads and Highways

- Interstate
- U.S. Highway
- State Numbered Highway
- State Lettered Highway
- Principal Road
- Road or Street
- Private Road or Drive

County Boundaries

1:24,000 Rivers and Streams

- Perennial Stream/River
- Intermittent Stream/River
- Artificial Path (Approx. Centerline)
- Undifferentiated Stream/River
- Canal or Ditch
- Other Hydrologic Feature

NHD Rivers and Streams

- Perennial Stream/River
- Intermittent Stream/River
- Canal or Ditch
- (cont)

- Artificial Path (Approx. Centerline)
- Other Hydrologic Feature

Incorporated Areas

- City
- Town
- Village
- Census Designated Place
- Other

1:24,000 Water Bodies

- Lake or Pond
- Lake or Pond (Intermittent)
- Reservoir
- Stream or River
- Swamp or Marsh
- Canal or Ditch
- Other Water Body

NHD Water Bodies

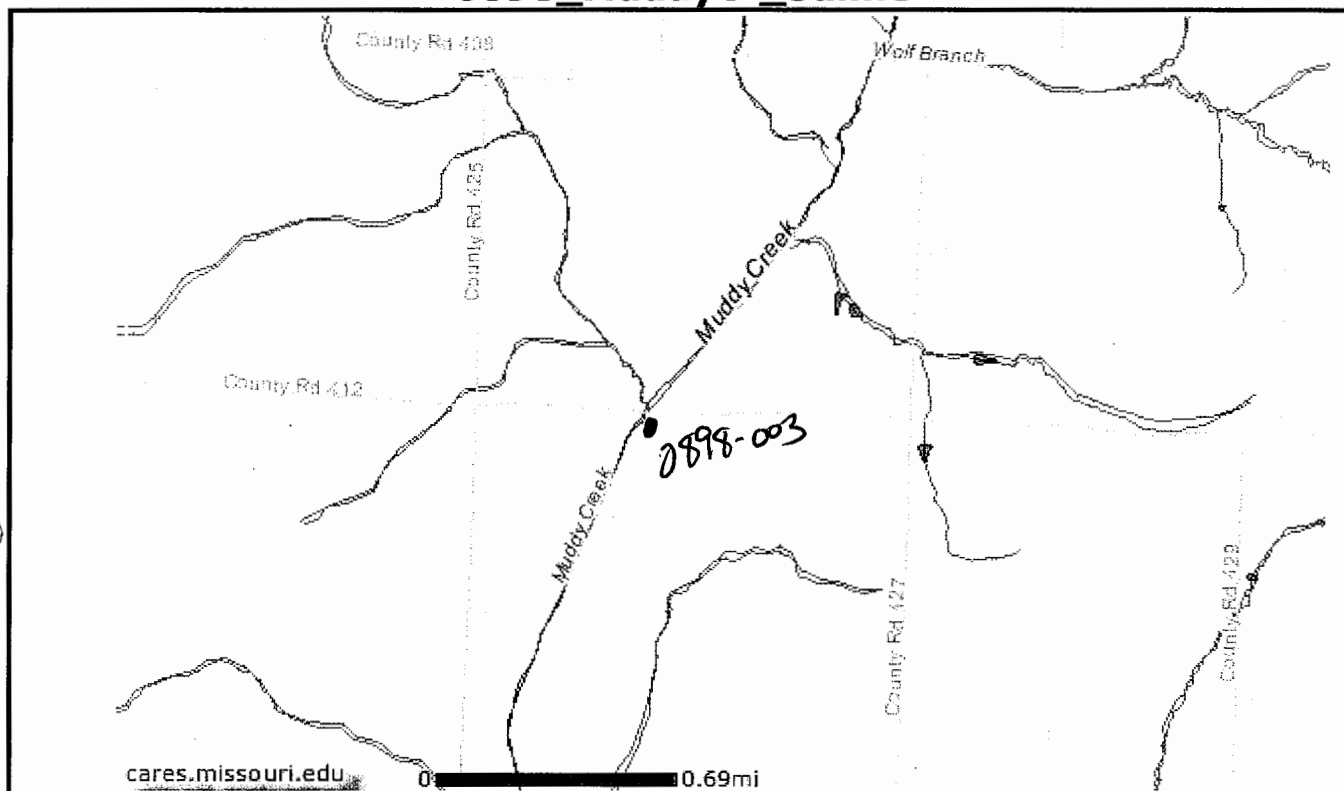
- Lake or Pond
- Lake or Pond (Intermittent)
- Reservoir
- Stream or River
- Swamp or Marsh
- (cont)

Location Map



Map prepared by:
<http://cares.missouri.edu>, 7/11

0898_MuddyCr_Saline



Legend

- Water Quality Information System (WQIS)

Roads and Highways

- Interstate
- U.S. Highway
- State Numbered Highway
- State Lettered Highway
- Principal Road
- Road or Street
- Private Road or Drive

County Boundaries

1:24,000 Rivers and Streams

- Perennial Stream/River
- Intermittent Stream/River
- Artificial Path (Approx. Centerline)
- Undifferentiated Stream/River
- Canal or Ditch
- Other Hydrologic Feature

NHD Rivers and Streams

- Perennial Stream/River
 - Intermittent Stream/River
 - Canal or Ditch
- (cont)

- Artificial Path (Approx. Centerline)
 - Other Hydrologic Feature
- ### Incorporated Areas

- City
- Town
- Village
- Census Designated Place
- Other

1:24,000 Water Bodies

- Lake or Pond
- Lake or Pond (Intermittent)
- Reservoir
- Stream or River
- Swamp or Marsh
- Canal or Ditch
- Other Water Body

NHD Water Bodies

- Lake or Pond
 - Lake or Pond (Intermittent)
 - Reservoir
 - Stream or River
 - Swamp or Marsh
- (cont)

Location Map



Map prepared by:
<http://cares.missouri.edu>, 7/11

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: <i>0898-001</i>	Site Location Description: <i>County Rd 103 SALINE, CO.</i>	
Site GPS Coordinates: <i>N39.27796 W093.18429</i>		
Date & Time: <i>7/13/05 8:24 AM</i>	Facility Name: <i>Miami Township R-1 School</i>	
Personnel: <i>Aaron Bleibauer</i>	Permit Number: <i>MO 0094561</i>	
Current Weather Conditions: <i>Clear 75°F</i>	Weather Conditions for Past 7 days: <i>Dry, Hot</i>	
Photo Ids: Upstream: <i>1, 2</i>	Downstream: <i>3, 4</i>	Other:

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <i>Bean fields</i>	

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 0898-001:

Stream Morphology:

Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): <u>10</u>	Length (ft): <u>50</u>	Avg. Depth (ft): <u>1.0 ft</u>	Max. Depth (ft): <u>1.5 ft</u>
<input type="checkbox"/> Flow	Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Estimated (ft ³ /sec):	

Downstream View Physical Dimensions:

<input checked="" type="checkbox"/> Riffle	Width (ft): <u>12</u>	Length (ft): <u>30</u>	Avg. Depth (ft): <u>1.0 ft</u>	Max. Depth (ft): <u>1.25 ft</u>
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec): <u>0.5 ft³/sec</u>	

Substrate*: (These values should add up to 100%.)

<u>10</u> % Cobble	% Gravel	% Sand	<u>90</u> % Silt	% Mud/Clay	% Bedrock
--------------------	----------	--------	------------------	------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

<u>5% algae</u>

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input checked="" type="checkbox"/> Other: <u>Muddy</u>
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

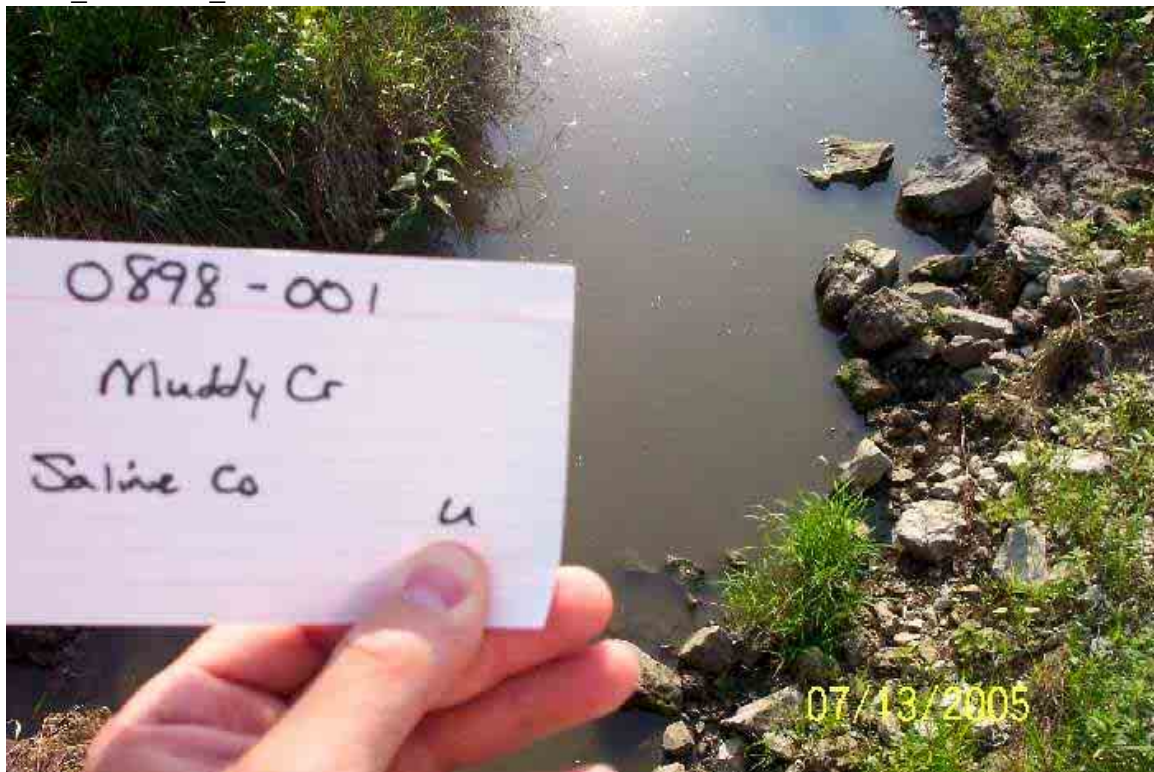
*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature] Date: 7/13/05

Organization: MoDNR - KCRD Position: Env. Specialist

0898_001-0276_US



0898_001-0277_US



0898_001-0279_DS



0898_001-0280_DS



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 0898-002	Site Location Description: MO Hwy 41 Saline Co.	
Site GPS Coordinates: N 39.26584 W 093.22587		
Date & Time: 7/13/05 8:44 AM	Facility Name: Miami Township R-1 school	
Personnel: Aaron Bleisauer	Permit Number: MO 0094561	
Current Weather Conditions: Clear 75°F	Weather Conditions for Past 7 days: Hot, Dry	
Photo Ids: Upstream: 5, 6	Downstream: 7, 8	Other:

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*:

(Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: Bean fields	

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 0899-002:

Stream Morphology:

Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Run	Width (ft): <u>15</u>	Length (ft): <u>30</u>	Avg. Depth (ft): <u>1.0 ft</u>	Max. Depth (ft): <u>1.5 ft</u>
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec): <u>0.5 ft³/sec</u>		

Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Run	Width (ft): <u>20</u>	Length (ft): <u>40</u>	Avg. Depth (ft): <u>1.0 ft</u>	Max. Depth (ft): <u>1.25 ft</u>
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec): <u>1.5 ft³/sec</u>		

Substrate*: (These values should add up to 100%.)

<u>10</u> % Cobble	% Gravel	<u>10</u> % Sand	<u>80</u> % Silt	% Mud/Clay	% Bedrock
--------------------	----------	------------------	------------------	------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

<u>2% alge</u>

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input checked="" type="checkbox"/> Other: <u>muddy</u>
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

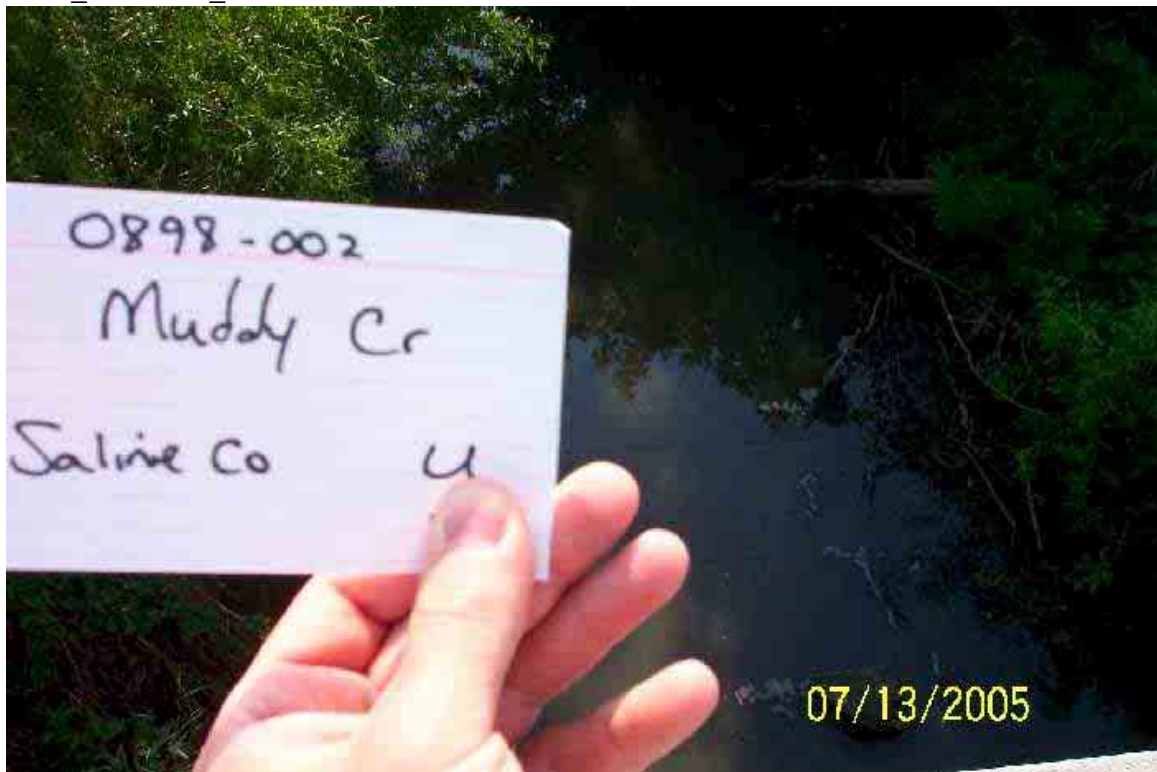
*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

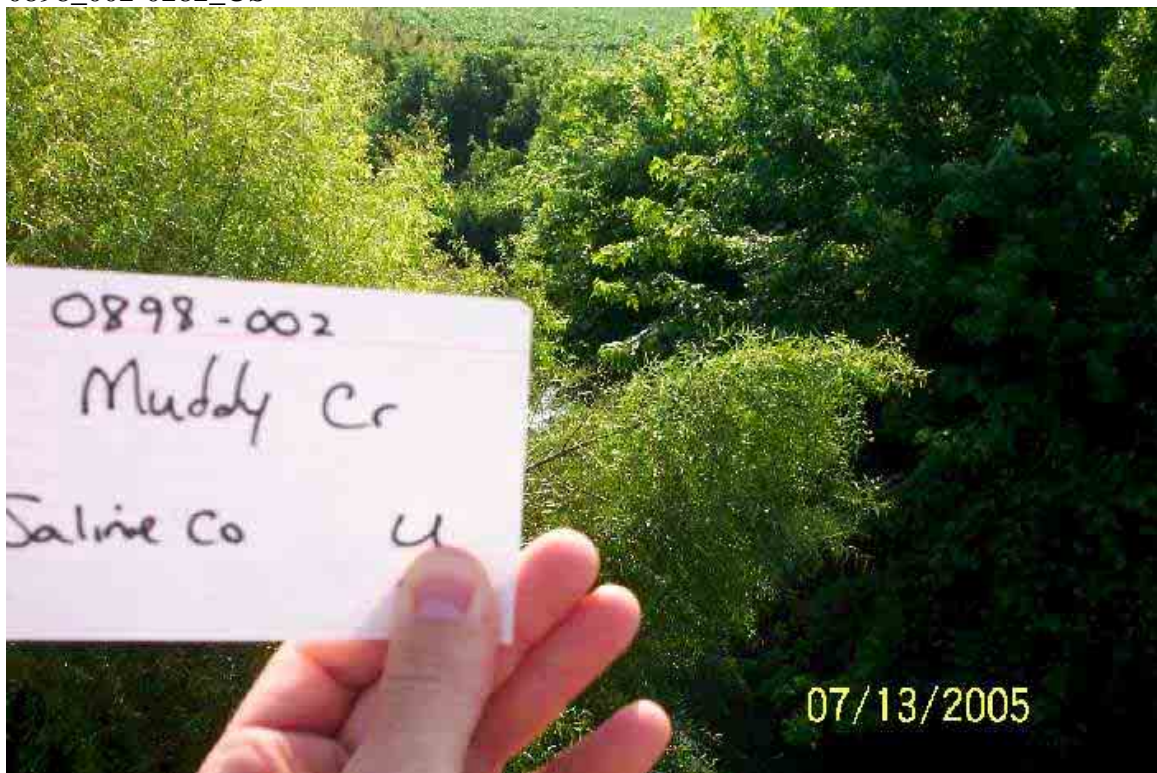
Signed: Kevin Blight Date: 4/13/05

Organization: MOA/NR - RCRO Position: Environmental Specialist

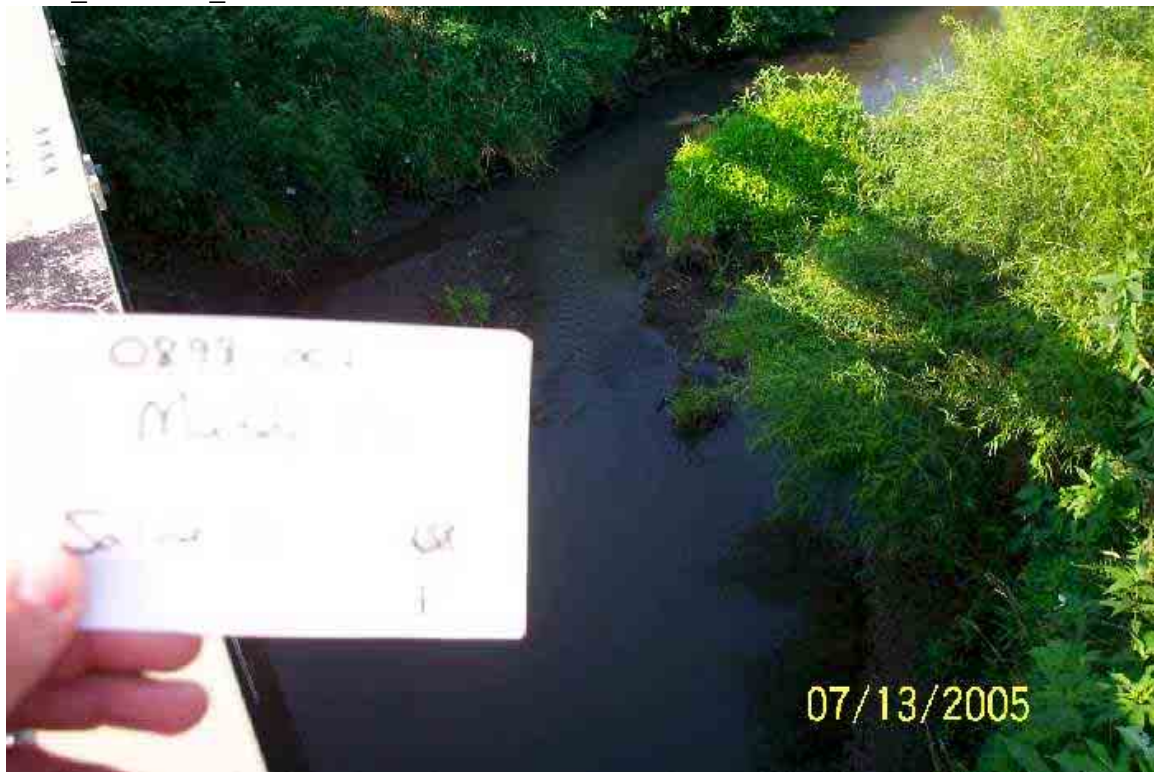
0898_002-0281_US



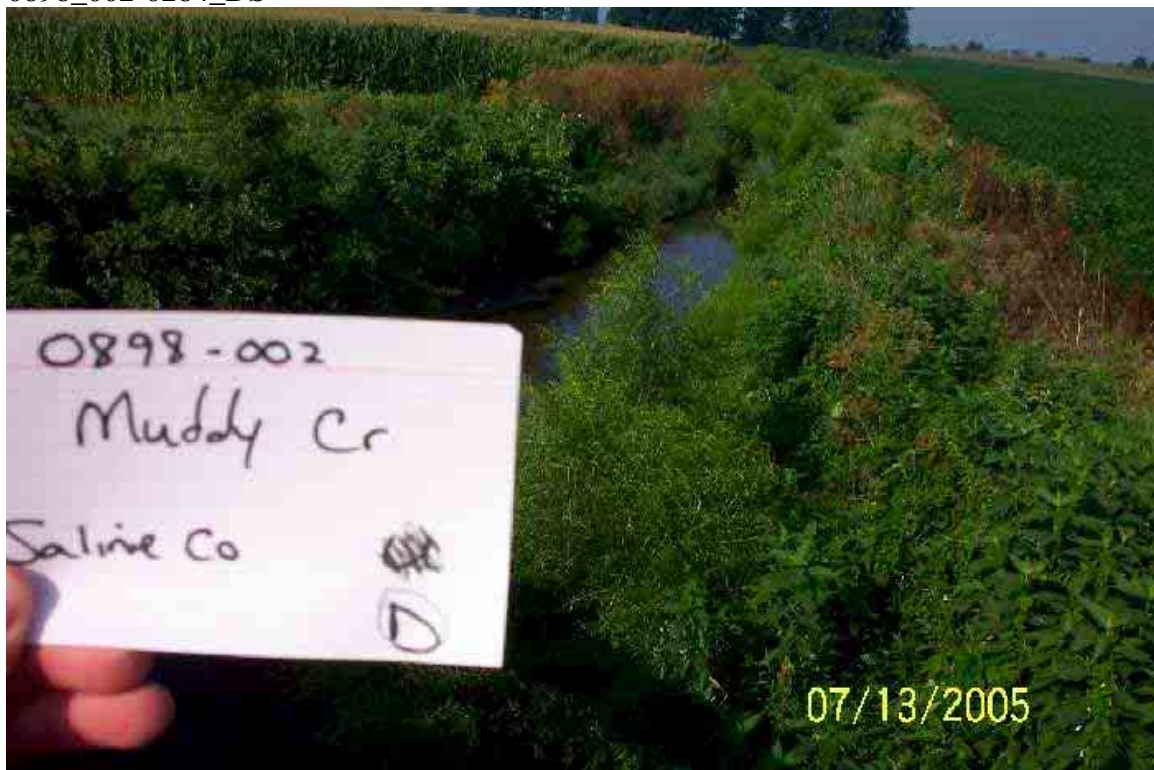
0898_002-0282_US



0898_002-0283_DS



0898_002-0284_DS



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: <u>0898-063</u>		Site Location Description: <u>County Rd 412 Saline Co.</u>	
Site GPS Coordinates: <u>N39.21133 W093.27307</u>			
Date & Time: <u>7/13/05 9:07 AM</u>		Facility Name: <u>Miami Township R-2 school</u>	
Personnel: <u>Aaron Bleibaum</u>		Permit Number: <u>MO 0094561</u>	
Current Weather Conditions: <u>Clear 76°F</u>		Weather Conditions for Past 7 days: <u>Hot, Dry</u>	
Photo Ids: Upstream: <u>9-10</u>	Downstream: <u>11-12</u>	Other:	

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>Corn / Bean Fields</u>	

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 0898-003:

Stream Morphology:

Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Run	Width (ft): <u>10</u>	Length (ft): <u>100</u>	Avg. Depth (ft): <u>1.0 ft</u>	Max. Depth (ft): <u>1.5 ft</u>
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec): <u>1.5 ft³/sec</u>	

Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Run	Width (ft): <u>10</u>	Length (ft): <u>100</u>	Avg. Depth (ft): <u>1.0 ft</u>	Max. Depth (ft): <u>1.5 ft</u>
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec): <u>1.5 ft³/sec</u>	

Substrate*: (These values should add up to 100%.)

<u>5</u> % Cobble	% Gravel	% Sand	<u>95</u> % Silt	% Mud/Clay	% Bedrock
-------------------	----------	--------	------------------	------------	-----------

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

<u>5% algae</u>

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input checked="" type="checkbox"/> Other: <u>muddy</u>
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

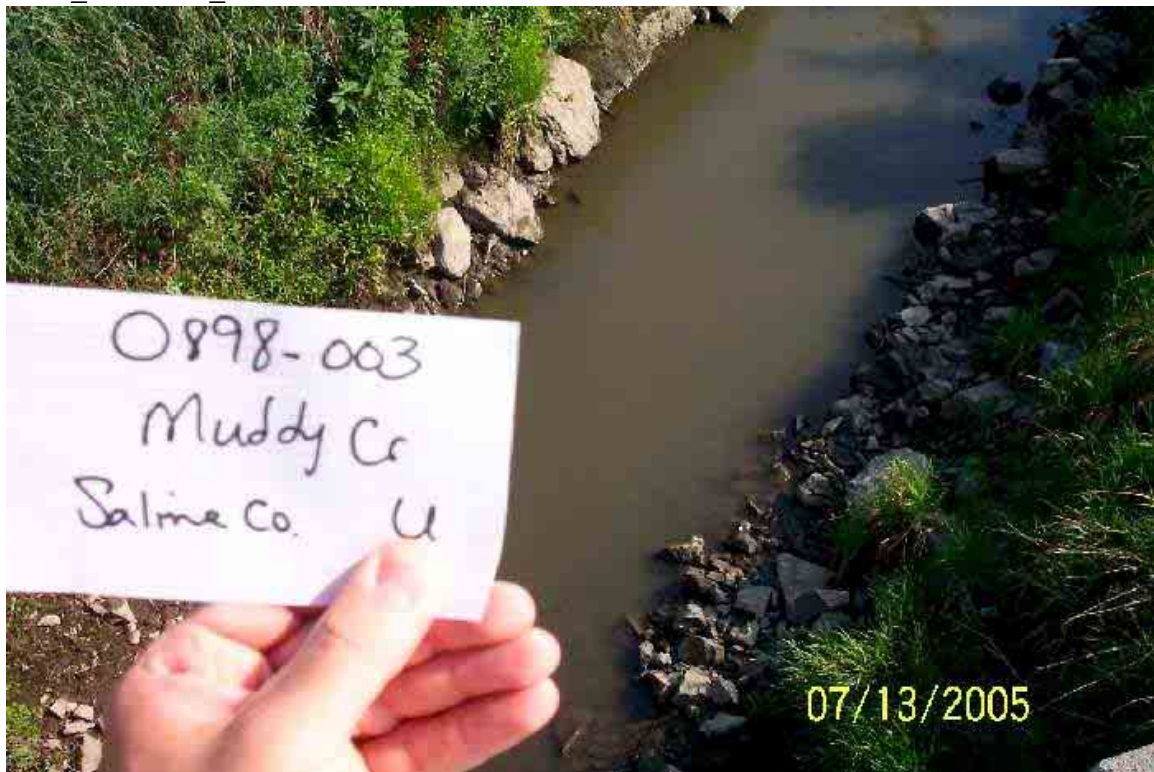
*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Ron Blebaum Date: 7/13/05

Organization: MODNR - KCRO Position: Env. Specialist

0898_003-0285_US



0898_003-0286_US



0898_003-0287_DS



0898_003-0288_DS

